# 1 SECTION 8-17, IMPACT ATTENUATOR SYSTEMS 2 February 13, 1995

3 Division 8 is revised by adding the following new section:

### 8-17 IMPACT ATTENUATOR SYSTEMS

### 8-17.1 Description

This work shall consist of furnishing, constructing, repairing, and removing temporary impact attenuator systems and furnishing and constructing permanent impact attenuator systems, including pads, nose covers, and transitions.

#### 8-17.2 Materials

The Contractor shall select impact attenuator systems from the approved list shown in the Plans.

Sand for inertial barrier systems shall be dry and meet the requirements of fine aggregate Class 1 for Portland cement concrete specified in Section 9-03. Urea shall be thoroughly mixed with the sand in an amount equal to 5 percent by weight of the sand to guard against freezing.

## 8-17.3 Construction Requirements

Installation shall be in accordance with the manufacturer's recommendations. This shall include the connection to concrete barrier or a bridge abutment and the transition section identified in the Plans, construction of steel reinforced concrete pads or anchors, construction of reinforced concrete backup, and attachment to pavement.

The Contractor shall have a complete set of replacement parts on the job site for each type of temporary impact attenuators in use and shall repair all damaged temporary impact attenuators immediately. During repair of damaged impact attenuators, the Contractor shall provide necessary traffic control as approved by the Engineer.

Temporary impact attenuators shall not be used for permanent impact attenuators.

As soon as a temporary impact attenuator is no longer needed, as determined by the Engineer, the Contractor shall remove it from the project and it shall remain the property of the Contractor.

#### 8-17.4 Measurement

Temporary and permanent impact attenuators will be measured per each for each installation.

Resetting impact attenuators will be measured per each for each installation that is adjusted or reset to a new location on the project.

# 8-17.5 Payment

Payment will be made in accordance with Section 1-04.1, for the following bid items when they are included in the proposal.

"Temporary Impact Attenuator", per each.

2.

123456789

- "Permanent Impact Attenuator", per each.
  "Repair Impact Attenuator", by force account as provided in Section 1-09.6.
  To provide a common proposal for all bidders, the Contracting Agency has entered an amount for "Repair Impact Attenuator" in the proposal to become a part of the total bid by the Contractor. No payment will be made for repair of impact attenuators damaged by the Contractor's operations. 3.
  - "Resetting Impact Attenuator", per each.
    The Contracting Agency will not pay for resetting impact attenuators when it is for the benefit of the Contractor's operations. 4.